

SANYO: DP50749-02 & DP50719-00
with PANASONIC 50" PLASMA PANEL (MD50H12NBC)
SYMPTOM: TV's GREEN POWER LED WILL NOT REMAIN ON

12/28/10

p#1
2009-9B

note: Unplugging any power cable from the SMPS to isolate the defective PCB will not work on this Panasonic panel.
Unplugging any of the power cables will cause the SMPS to shut down.

a) Unplug LVDS Cable (40 pin connector) from Main to Digital "D" Bd. (D5 connector) behind Main:

This will eliminate the Main Bd., and see if the SMPS will power ON automatically, and remain ON.

Plug the AC Cord to power (do not push the Pwr Key on the TV) and see if the SMPS will power ON.

If the SMPS powers ON and remains ON, then the Main Bd. should be tried. If the SMPS continues to shutdown then resistance checks (#1-#12) below should be done.

note: This panel has a self test mode, and unplugging the LVDS starts the self test. No raster is displayed, because a special jig is needed to activate the raster & video.

b) If the Base has ever been removed from the TV, the metal leg could have cut the Flat Ribbon and PCB underneath the leg. Please see page #4.

RESISTANCE CHECKS TO POSSIBLY ISOLATE DEFECTIVE PCB

- 1) Is pin #1 or #2 (60V) of (P35 connector) shorted to chassis Gnd?
yes, shorted = PDP Panel N/G
not shorted = go to step #2
- 2) Is Pin #5 or #6 (5V) of (P25 connector) shorted to chassis Gnd?
yes, shorted = go to step #3
not shorted = go to step #4
- 3) Disconnect (p25 connector)
Is Pin #5 or #6 (5V) of (P25 connector) shorted to chassis Gnd?
yes, shorted = SMPS N/G
not shorted = go to step #4
- 4) Disconnect (SC20 connector)
Is pin #30 (5V) of SC20 connector shorted to chassis Gnd?
yes, shorted = SC Bd N/G
not shorted = go to step #5
- 5) Disconnect (SS23 connector)
Is pin #1 (5V) of SS23 connector shorted to chassis Gnd?
yes, shorted = SS Bd N/G
not shorted = go to step #6

Location of connectors is
on page #2

Please re-install all PCB mounting
screws whenever a board is
changed, and before re-testing
the TV. The ground screws are
needed to prevent damage to the
PCB.

After working on TV, if it has
several horizontal lines or bars,
please try reseating the flat
ribbons going to the SU & SD Bds.

Reconnect P25, SC20, & SS23 Connectors

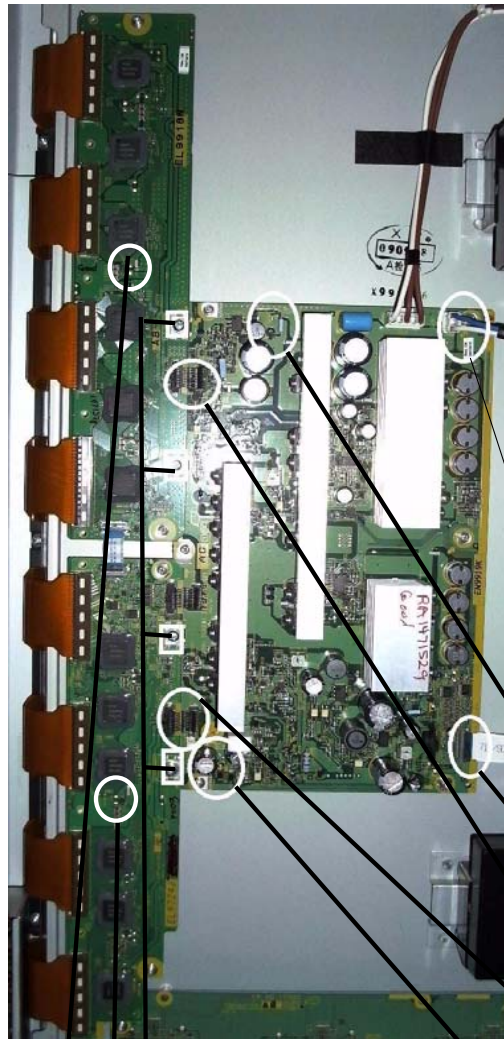
- 6) Disconnect (SC2 connector)
Is TPVSUS (SC2, pin #1, 193V) on SC Bd. Shorted to chassis Gnd?
yes, shorted = SC Bd. N/G
not shorted = go to step #7
- 7) Reconnect SC2 and disconnect (SS11 connector)
Is TPVSUS (SS11, pin #1, 193V) on SS Bd. Shorted to chassis Gnd?
yes, shorted = SS Bd. N/G
not shorted = Power ON TV, and check TPVSUS on SC Bd. for 193V before shutdown
If no output, = SMPS N/G
If 193V OK is before shutdown, SC Bd. may be defective (can not be sure)

Reconnect SS11 Connector

- 8) Is TPSC1 (143V) shorted to base pattern of SU/SD Bd?
Base Pattern Test Points are on attached page (please do not use chassis Gnd)
yes, shorted = go to step #9
not shorted = go to step #11, not necessary to check #9 - #10
- 9) Disconnect SU41 connector
Is TPSC1 shorted to base pattern of SU/SD Bd?
not shorted = SU Bd. may be defective
yes, shorted = go to step #10
- 10) Reconnect SU41 and disconnect SD42 connector
Is TPSC1 shorted to base pattern of SU/SD Bd?
not shorted = SD Bd. may be defective
yes, shorted = SC Bd. may be defective
- 11) Measure resistance across C956 (143V across cap.) on SD Bd.. If resistance is only a few ohms, the SD Bd. is defective.
- 12) Measure resistance across C907 (143V across cap.) on SU Bd.. If resistance is only a few ohms, the SU Bd. is defective.

If you can not find anything wrong and you suspect the panel is shorted, you can unplug the eight flat ribbons from the panel to the buffer bds. (SU & SD) and see if the SMPS will remain ON. You can not unplug the flat ribbons to the Sustain Drive (SS) Bd. (if you unplug the flat ribbon/s to the SS Bd. the panel will shut down). If all PCBs and other connections are OK, the SMPS will power ON and have all voltages with these ribbons unplugged. If the SMPS should remain ON with the ribbons unplugged, you should re-connect them and then verify that the SMPS still shuts down when they are connected.
note: The SMPS will remain ON, if one or more of the flat ribbons are unplugged from the panel to the buffer bds. (SU & SD), if the PCBs and other connections are OK.

SC Bd.



C907
C956

SC2

TPVSUS (SC Bd.)

SC20, pin #30

SU41

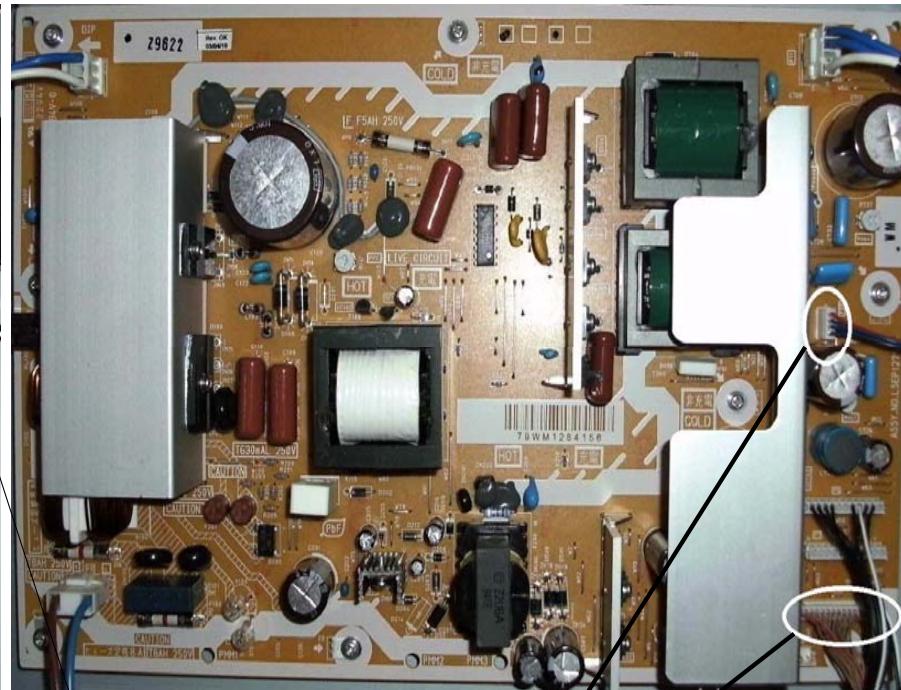
SD42

TPSC1

BASE PATTERN TEST POINTS:
4 screws total: 2 screws through SU & SC Bds.,
and 2 screws through SD & SC Bds.
(these screws are not chassis ground)

← VERY IMPORTANT

SMPS



P35

P25

TPVSUS (SS Bd.)

SS11

SS23

SS Bd.



p#2

DP50749-02
DP50719-00

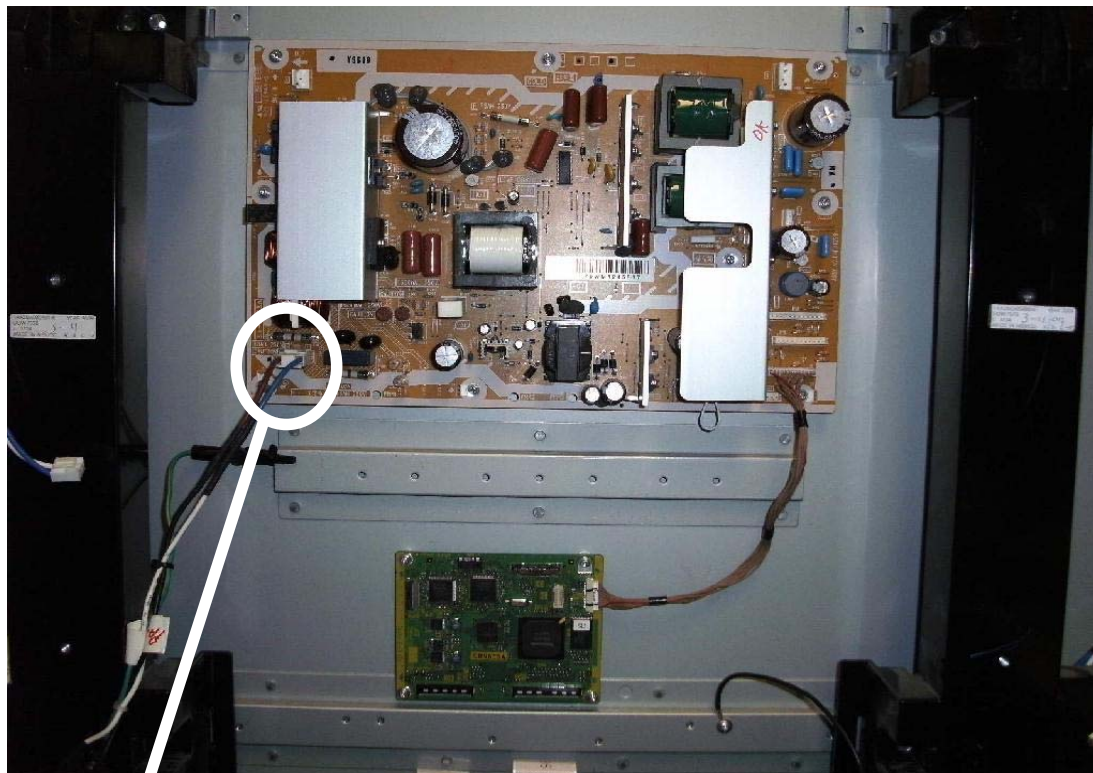
12/16/10

IF YOU BELIEVE THE SMPS IS DEFECTIVE

The SMPS can be checked, but all cables & flat ribbons from the SMPS & Digital Processor PCB must be unplugged. The only exception is the cable from D25 (D Bd.) to P25 (SMPS) must be connected. With everything disconnected except this one cable, and when power is applied to the SMPS, the SMPS should turn ON.

If the SMPS is working OK, please reconnect all connectors to the SMPS & Digital Processor. If one of the other PCBs is defective, it is possible to damage the SMPS, w/o the flat ribbons connected to the Digital Processor.

SMPS & Digital Processor



Apply power to the SMPS.

↑ No cables attached to SMPS or Digital Bd., except cable from D25 to P25.

These voltages should be present:

Connector:

| | | |
|----|----|-------|
| P2 | p1 | 193.6 |
| | p2 | |

| | | |
|----|-----|------|
| P6 | p1 | |
| | p2 | 15.5 |
| | p3 | 15.5 |
| | p4 | |
| | p5 | |
| | p6 | |
| | p7 | |
| | p8 | 15.5 |
| | p9 | 15.5 |
| | p10 | |
| | p11 | |
| | p12 | |

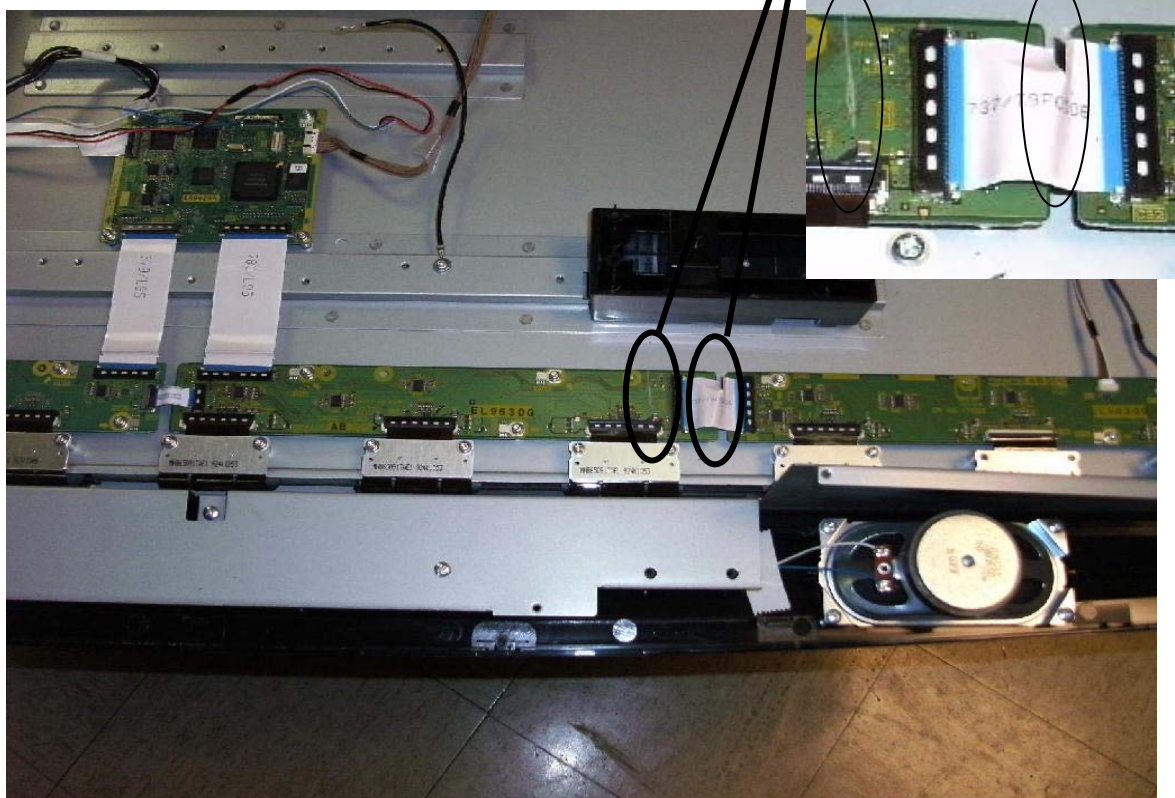
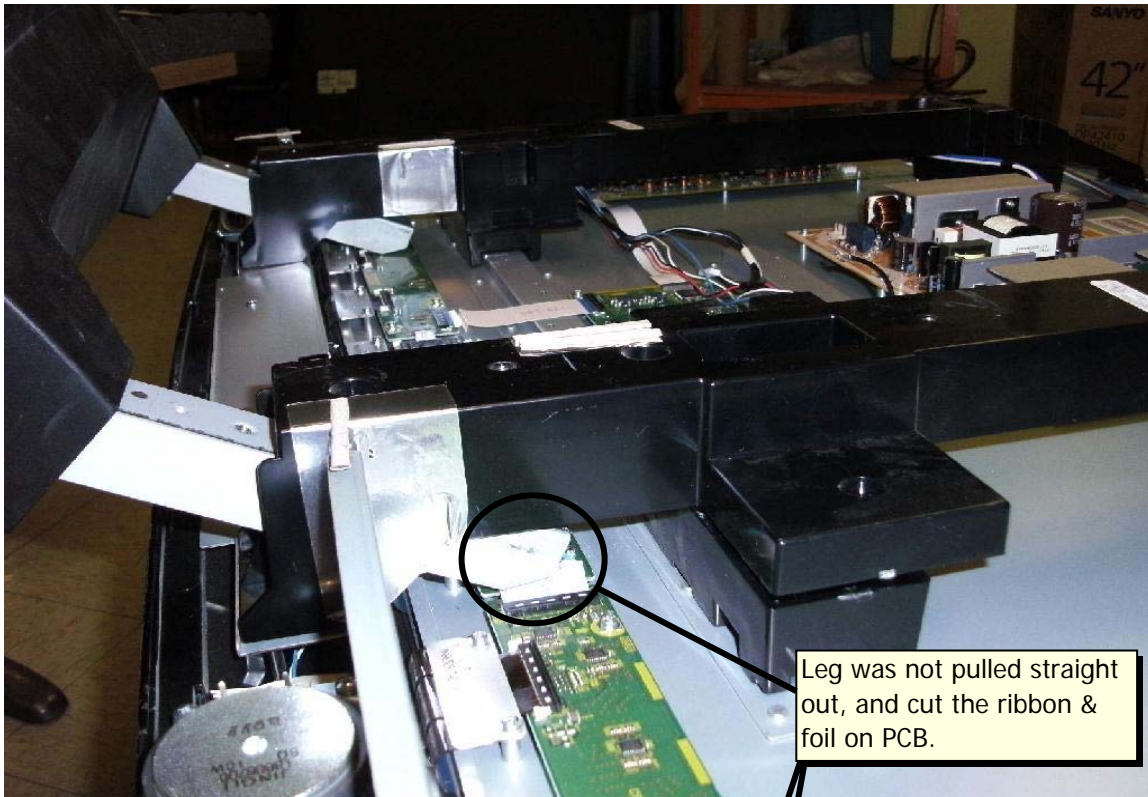
| | | |
|----|-----|-----|
| P7 | p1 | |
| | p2 | |
| | p3 | |
| | p4 | |
| | p5 | 5.0 |
| | p6 | |
| | p7 | |
| | p8 | |
| | p9 | |
| | p10 | |
| | p11 | |

| | | |
|-----|----|-------|
| P11 | p1 | 193.6 |
| | p2 | |
| | p3 | |
| | p4 | 15.5 |

| | | |
|-----|-----|------|
| P25 | p1 | 15.5 |
| | p2 | 15.5 |
| | p3 | |
| | p4 | |
| | p5 | 5.0 |
| | p6 | 5.0 |
| | p7 | |
| | p8 | |
| | p9 | 5.0 |
| | p10 | |
| | p11 | 3.3 |
| | p12 | |
| | p13 | |

| | | |
|-----|----|------|
| P35 | p1 | 60.3 |
| | p2 | 60.3 |
| | p3 | |
| | p4 | |

If the Base is removed from the TV, the metal leg can damage the flat ribbon between the C2 & C3 PCBs, if it is not pulled straight out from the TV. It can also cut the foil on the C2 PCB. If the ribbon is cut, the part # is TSXL737.



Notice



- ☐ CORRECTION
 ☒ PRODUCTION CHANGE
☐ SERVICE FLASH
 ☐ ADD INFORMATION

FILE NO.

Please add this notice to the Service Manual listed below.

REVISION 0

Category: **COLOR TELEVISION** Date: **OCTOBER / 29 / 2009**
 Model: **DP50749** Effective from : Chassis No. **P50749-02**
 Destination: **U.S.A. / CANADA** REF : **No. SM780163-02**

NOTE: Match the Chassis No. on the unit's back cover with the Chassis No. in the Service Manual. **If the Service Manual Chassis No. does not match the unit's**, additional Service Literature is required. This chassis is similar to Chassis No. P50749-00. Only the **difference** Service Information is given in this manual. For detailed Service Information, refer to the **Original** Service Manual and **Notices** for Chassis No. P50749-00 used in Model DP50749 (SM780163).

SERVICING SHOULD BE PERFORMED BY ONLY TRAINED AND QUALIFIED SERVICE PERSONNEL.

1. IN THE SERVICE ADJUSTMENTS

PAGE 4 ON-SCREEN SERVICE MENU

Item No. **088 OP2 Data** should be changed from **3Ch** to **3Eh** in the table and in Note 2.

2. IN THE CHASSIS ELECTRICAL PARTS LIST MISCELLANEOUS

The reason for change.

- A : Misprint B : Quality Reliability C : Standardization
 D : Design E : Add as a possible sub F : Schematic location change
 G : Purchasing Request

| Page & Section | Schematic Location | | Part No. | Description | Q'ty | Interchangeability | Reason |
|--|--------------------|-----|---------------|----------------------|------|--------------------|--------|
| Page 11, Chassis Electrical Parts List | C1646 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | CK1H333KLZBNG | CERAMIC 0.033U K 50V | 1 | NO | |
| | C1649 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | CK1H682KLZBNG | CERAMIC 6800P K 50V | 1 | NO | |
| | C1652 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | CEXLB1C102VDN | ELECT 1000U M 16V | 1 | NO | |
| | C1654 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | CK1E103KMNBNG | CERAMIC 0.01U K 25V | 1 | NO | |

| Page & Section | Schematic Location | | Part No. | Description | Q'ty | Interchangeability | Reason |
|--|--------------------|-----|---------------|---------------------|------|--------------------|--------|
| Page 11 Chassis Electrical Parts List | C1655 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | CK1E103KMNBNG | CERAMIC 0.01U K 25V | 1 | NO | |
| | C1656 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | CC1H391JLZCNG | CERAMIC 390P J 50V | 1 | NO | |
| | C1658 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | CK1H104KLZBNG | CERAMIC 0.1U K 50V | 1 | NO | |
| | C1659 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | CK1E105KGMBNG | CERAMIC 1U K 25V | 1 | NO | |
| | C1662 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | CEXLB1C102VDN | ELECT 1000U M 16V | 1 | NO | |
| | C1665 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | CK1E105KGMBNG | CERAMIC 1U K 25V | 1 | NO | |
| | C1666 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | CEXLB0J102VDN | ELECT 1000U M 6.3V | 1 | NO | |
| | C1667 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | CK1E105KGMBNG | CERAMIC 1U K 25V | 1 | NO | |
| | C1668 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | CC1H221JLZCNG | CERAMIC 220P J 50V | 1 | NO | |
| | C1669 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | CK1H104ZLZFNG | CERAMIC 0.1U Z 50V | 1 | NO | |
| | C1679 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | CC1H221JLZCNG | CERAMIC 220P J 50V | 1 | NO | |
| Page 14 Chassis Electrical Parts List | D1604 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | DDSS3P3-E3--G | CERAMIC 390P J 50V | 1 | NO | |
| | D1605 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | DDSS3P3-E3--G | CERAMIC 390P J 50V | 1 | NO | |
| Page 14 Chassis Electrical Parts List | IC1611 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | QBD9845FV---P | CERAMIC 390P J 50V | 1 | NO | |
| | L1602 | Old | 1LB4L26B0740G | INDUCTOR, 220 OHM | 1 | NO | D |
| | | New | N/A | NOT USED | 0 | NO | |

| Page & Section | Schematic Location | | Part No. | Description | Q'ty | Interchangeability | Reason |
|---|--------------------|-----|---------------|-------------------------|------|--------------------|--------|
| Page 14, Chassis Electrical Parts List | L1604 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | 1LB4L26B0740G | INDUCTOR, 220 OHM | 1 | NO | |
| | L1608 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | 1LB4L26B0740G | INDUCTOR, 220 OHM | 1 | NO | |
| | L1610 | Old | 1LB4L26B0740G | INDUCTOR, 220 OHM | 1 | NO | D |
| | | New | N/A | NOT USED | 0 | NO | |
| | L1633 | Old | 1LB4L26B0740G | INDUCTOR, 220 OHM | 1 | NO | D |
| | | New | N/A | NOT USED | 0 | NO | |
| | L1634 | Old | 1LB4L26B0740G | INDUCTOR, 220 OHM | 1 | NO | D |
| | | New | N/A | NOT USED | 0 | NO | |
| | L1635 | Old | 1LB4L26B0740G | INDUCTOR, 220 OHM | 1 | NO | D |
| | | New | N/A | NOT USED | 0 | NO | |
| | L1636 | Old | RGFR000ZTAANL | MT-GLAZE 0.000 ZA 1/10W | 1 | NO | D |
| | | New | N/A | NOT USED | 0 | NO | |
| | L1637 | Old | RGFR000ZTAANL | MT-GLAZE 0.000 ZA 1/10W | 1 | NO | D |
| | | New | N/A | NOT USED | 0 | NO | |
| | L1638 | Old | RGFR000ZTAANL | MT-GLAZE 0.000 ZA 1/10W | 1 | NO | D |
| | | New | N/A | NOT USED | 0 | NO | |
| | L1644 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGFR000ZTAANL | MT-GLAZE 0.000 ZA 1/10W | 1 | NO | |
| | L1645 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGFR000ZTAANL | MT-GLAZE 0.000 ZA 1/10W | 1 | NO | |
| | L1646 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | 1AV4L26B5930N | INDUCTOR, 10U | 1 | NO | |
| Page 15, Chassis Electrical Parts List | L1686 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGFR000ZTAANL | MT-GLAZE 0.000 ZA 1/10W | 1 | NO | |
| | L5730 | Old | RGFR000ZTAANL | MT-GLAZE 0.000 ZA 1/10W | 1 | NO | D |
| | | New | N/A | NOT USED | 0 | NO | |
| | L5731 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGFR000ZTAANL | MT-GLAZE 0.000 ZA 1/10W | 1 | NO | |

| Page & Section | Schematic Location | | Part No. | Description | Q'ty | Interchangeability | Reason |
|---|--------------------|-----|---------------|-------------------------|------|--------------------|--------|
| Page 15, Chassis Electrical Parts List | L6602 | Old | RGFR000ZTAANL | MT-GLAZE 0.000 ZA 1/10W | 1 | NO | D |
| | | New | N/A | NOT USED | 0 | NO | |
| | L6603 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGFR000ZTAANL | MT-GLAZE 0.000 ZA 1/10W | 1 | NO | |
| | Q1603 | Old | T2SC3928A1R-P | TR 2SC3928A1S | 1 | NO | D |
| | | New | N/A | NOT USED | 0 | NO | |
| | Q1641 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | TAO4449-----P | TR AO4449 | 1 | NO | |
| | Q1803 | Old | T2SC3928A1R-P | TR AO4449 | 1 | NO | D |
| | | New | N/A | NOT USED | 0 | NO | |
| Page 16 Chassis Electrical Parts List | R017 | Old | RGF4700JTCANL | MT-GLAZE 470 JA 1/10W | 1 | NO | D |
| | | New | N/A | NOT USED | 0 | NO | |
| | R018 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGF4700JTCANL | MT-GLAZE 470 JA 1/10W | 1 | NO | |
| Page 17 Chassis Electrical Parts List | R1615 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGF7501JTCANL | MT-GLAZE 7.5K JA 1/10W | 1 | NO | |
| | R1616 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGF1001JTCANL | MT-GLAZE 1K JA 1/10W | 1 | NO | |
| | R1617 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGF1001JTCANL | MT-GLAZE 1K JA 1/10W | 1 | NO | |
| | R1618 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGF6801FTCANL | MT-GLAZE 6.8K FA 1/10W | 1 | NO | |
| | R1640 | Old | RWXLB71R2KXAL | WIRE WOUND 1.2 KA 7W | 1 | NO | D |
| | | New | N/A | NOT USED | 0 | NO | |
| Page 18 Chassis Electrical Parts List | R1668 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGF2202FTCANL | MT-GLAZE 22K FA 1/10W | 1 | NO | |
| | R1669 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGF1002FTCANL | MT-GLAZE 10K FA 1/10W | 1 | NO | |
| | R1675 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGF1002FTCANL | MT-GLAZE 10K FA 1/10W | 1 | NO | |

| Page & Section | Schematic Location | | Part No. | Description | Q'ty | Interchangeability | Reason |
|--|--------------------|-----|---------------|-------------------------|------|--------------------|--------|
| Page 18 Chassis Electrical Parts List | R1676 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGF1002FTCANL | MT-GLAZE 10K FA 1/10W | 1 | NO | |
| | R1680 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RN1R005JTfANL | MT-FILM 0.005 JA 1W | 1 | NO | |
| | R1681 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGF18R0JTCANL | MT-GLAZE 18 JA 1/10W | 1 | NO | |
| | R1682 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGF2202JTCANL | MT-GLAZE 22K JA 1/10W | 1 | NO | |
| | R1812 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGF4701JTCANL | MT-GLAZE 4.7K JA 1/10W | 1 | NO | |
| | R1813 | Old | RGF1002JTCANL | MT-GLAZE 10K JA 1/10W | 1 | NO | D |
| | | New | N/A | NOT USED | 0 | NO | |
| Page 20 Chassis Electrical Parts List | R6300 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGF1000JTCANL | MT-GLAZE 100 JA 1/10W | 1 | NO | |
| | R6319 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGF1000JTCANL | MT-GLAZE 100 JA 1/10W | 1 | NO | |
| | R6347 | Old | RGFR000ZTCANL | MT-GLAZE 0.000 ZA 1/10W | 1 | NO | D |
| | | New | N/A | NOT USED | 0 | NO | |
| | R6349 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGFR000ZTCANL | MT-GLAZE 0.000 ZA 1/10W | 1 | NO | |
| Page 16 Chassis Electrical Parts List | R822 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGF4701JTCANL | MT-GLAZE 4.7K JA 1/10W | 1 | NO | |
| | R840 | Old | RGFR000ZTCANL | MT-GLAZE 0.000 ZA 1/10W | 1 | NO | D |
| | | New | N/A | NOT USED | 0 | NO | |

| Page & Section | Schematic Location | | Part No. | Description | Q'ty | Interchangeability | Reason |
|--|--------------------|-----|---------------|---------------------------|------|--------------------|--------|
| Page 16, Chassis Electrical Parts List | R843 | Old | N/A | NOT USED | 0 | NO | D |
| | | New | RGF4701JTCANL | MT-GLAZE 4.7K JA 1/10W | 1 | NO | |
| Page 21, Chassis Electrical Parts List | ▲ WK5LV -PN | Old | 1AA4W30B56400 | CORD 50INCH,40P-31P(LVDS) | 1 | NO | D |
| | | New | 1AA4W30B61901 | CORD 50INCH,40P-31P(LVDS) | 1 | NO | |
| | ▲ EL901 | Old | 1AV4T44B02600 | PDP MODULE | 1 | NO | D |
| | | New | 1AV4T44B02800 | PDP MODULE | 1 | NO | |

For parts or service contact:

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